

9/14/2011

Site visit of Barton Springs Complex with Laurie Dries, Environmental Scientist
for the City of Austin Watershed Protection Program

In attendance: Angie Reisch, Joshua Booker, Alisa Shull, Erik Orsak

Barton Springs Complex (Main Spring (Pool), Eliza, Sunken Gardens, Upper Barton)

The drought has reduced conductivity, increased sedimentation, increased temperature, and lowered the dissolved oxygen (DO) of the spring water. Surveys for salamanders are conducted monthly.

Currently, salamanders are found at very low numbers. The Austin blind salamander has been observed in 3 of the 4 spring systems in the complex: Eliza, Sunken Gardens, and the Main Spring (pool).

Eliza Springs

The drought has lowered the water level and DO has dropped to 3.6 mg/L. Normal DO is between 5-6 mg/L. The spring is currently being aerated by an aeration system. The water level is currently being managed so that Eliza does not go dry. The substrate in Eliza Spring is concrete, approximately 12" deep. There are occasional trespassers in Eliza; however they cause little damage to the habitat.

Sunken Gardens/Old Mill

More Austin blind salamanders have been found in this spring compared to the others. The spring is currently being aerated because of low DO levels caused by drought conditions. Trespassers are an issue as they will unplug the aeration system and damage habitat by discarding garbage. Sunken Gardens has the lowest flow of all the springs in the Barton Springs Complex. Sunken Gardens is the only spring that Austin blind salamanders have been observed in that has natural substrate; the true depth and topography of the spring is not known. Only one or two Austin blinds have been observed this year during surveys. Neither species has returned to previous numbers since the 2008/2009 drought. Surveys are currently conducted with less disturbance of the habitat because high sedimentation caused by low water levels is an issue.

Upper Barton

This is the only spring in the complex that has not been impounded. Upper Barton Springs, located upstream of Main Spring (Pool) is currently dry at the surface; this occurs when flows drop below 40 cfs. When the spring is dry Barton Springs salamanders retreat underground in the aquifer. Although the

Austin blind has never been observed in this spring, Dries believes that Austin blinds likely use this habitat, but have never been observed because they occur at such low numbers at the surface.